

AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** An optical disk having at least a recording layer for recording information, said recording layer disk comprising:

a first recording area for recording contents data and data for recording and reproducing the contents data; and

a second recording area for recording secondary data on the contents recorded in the first recording area;

wherein said second recording area ~~comprising:~~ comprises a first section for recording control data on the second recording area, a second section for recording data not to be inhibited from being outputted from a recording and reproducing apparatus for the optical disk and a third section for recording data to be inhibited from being outputted from the recording and reproducing apparatus for the optical disk, and

~~a first section for recording control data on the second recording area;~~

~~a second section for recording data not to be inhibited to be outputted from a recording and reproducing apparatus for the optical disk; and~~

~~a third section for recording data to be inhibited to be outputted from the recording and reproducing apparatus for the optical disk;~~

wherein the control data recorded in the first section includes an identifier which shows whether said second recording area includes said third section ~~or not~~.

2. **(Original)** The optical disk according to claim 1, wherein data recorded in the second recording area are stripe marks longer in radial direction and cannot be overwritten after they are written once.

3. **(Original)** The optical disk according to claim 1, wherein the data for recording and reproducing the contents data in said first recording area include an identifier which shows whether information is recorded in said second recording area.

4. **(Currently amended)** The optical disk according to claim 1, wherein an identifier which shows whether information that is recorded in said second recording area is recorded in said first section in said second recording area.

5. **(Original)** The optical disk according to claim 1, wherein the data for recording and reproducing the contents data in said first recording area include an identifier which shows whether information is recorded additionally in said second recording area and an amount of recorded data in said second recording area.

6. **(Original)** The optical disk according to claim 1, wherein ciphered data are recorded in said third section in said second recording area.

7. **(Original)** The optical disk according to claim 1, wherein a disk identifier different for each optical disk is recorded in said second recording area.

8. **(Original)** The optical disk according to claim 1, wherein said second recording area is provided at a predetermined area in an inner peripheral section or an outer peripheral section in the disk.

9. **(Currently amended)** The optical disk according to claim 1, wherein ~~data are recorded~~ in data of said first recording area comprises data stored in the recording layer ~~by generating as~~

uneven pits in a reflection film, and ~~data are recorded by removing the reflection film partially as stripe marks longer in the radial direction.~~

wherein data of said first recording area comprises partially removed stripe marks, of said reflection film, longer in the radial direction.

10. **(Currently amended)** The optical disk according to claim 1, wherein said first recording area is includes an area to which information can be written.

11. **(Currently amended)** The optical disk according to claim 10, wherein said first recording area has ~~said~~ a recording layer to which data can be recorded with an optical device.

12. **(Original)** The optical disk according to claim 11, wherein said first recording area has said recording layer to which data can be recorded with an optical device a plurality of times.

13. **(Currently amended)** The optical disk according to claim 10, ~~wherein said~~ further comprising a recording layer comprises including an organic layer changeable between two states that are optically detectable optically.

14. **(Original)** The optical disk according to claim 12, wherein said recording layer comprises a magnetic layer having perpendicular magnetic anisotropy in a film normal direction.

15. **(Currently amended)** The optical disk according to claim 14, wherein said second recording area comprises barcode portions ~~of second recording area has~~ and portions between the barcode portions having smaller perpendicular magnetic anisotropy along film normal direction than said ~~non~~-barcode portions.

16. **(Original)** The optical disk according to claim 12, wherein said recording layer comprises a plurality of layered magnetic films.

17. **(Currently amended)** The optical disk according to claim 10, ~~wherein said~~ further comprising a recording layer comprises a recording layer made of Ge-Sb-Te alloy.

18. **(Currently amended)** The optical disk according to claim 10, ~~wherein said~~ further comprising a recording layer comprises including a film ~~changeable~~ reversibly changeable between two optically detectable states, ~~an amount of reflection light from said first recording area is different from that from said second recording area.~~

236 wherein an amount of reflection light from said first recording area is different from than from said second recording area.

19. **(Currently amended)** The optical disk according to claim 18, wherein said recording layer is ~~changeable~~ reversibly changeable between crystalline and amorphous states according to conditions of a light for illuminating said recording layer.

20. **(Currently amended)** The optical disk according to claim 19, wherein said recording layer comprises barcode portions made of an amorphous state and portions between the barcode portions made of a crystalline state.

21. **(Original)** The optical disk according to claim 19, wherein said recording layer comprises barcode portions, and nonbarcode portions between the barcode portions having a higher reflectivity than the barcode portions.

22. **(Currently amended)** A method for reproducing contents from an optical disk having at least a recording layer for recording information, ~~said~~ the recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, said method comprising ~~the steps of~~:

reproducing data from ~~said~~ the second recording area before reproducing data from ~~said~~ the first recording area;

deciding, based on control data included in data reproduced from ~~said~~ the second recording area, whether the data reproduced from ~~said~~ the second recording area include data to be inhibited ~~to be~~ from being outputted from a recording and reproducing apparatus for the optical disk to the external; and

processing the data to be inhibited ~~to be~~ from being outputted only in the recording and reproducing apparatus when the data reproduced from ~~said~~ the second recording area are determined to include the data to be inhibited ~~to be~~ from being outputted, without outputting the data to be inhibited ~~to be~~ from being outputted.

23. **(Currently amended)** The method according to claim 22, wherein data are reproduced from ~~said~~ the first recording area according to reproduction conditions included in the data to be inhibited ~~to be~~ from being outputted when the data reproduced from ~~said~~ the second recording area are determined to include the data to be inhibited ~~to be~~ from being outputted.

24. **(Currently amended)** The method according to claim 22, further comprising ~~the steps of~~:

reproducing data from ~~said~~ the first recording area; and

detecting an identifier which shows whether data exist in ~~said~~ the second recording area, in the data reproduced from ~~said~~ the first recording area;

wherein said ~~step of~~ reproducing data from ~~said~~ the second recording area is performed only when the identifier is detected.

25. **(Currently amended)** The method according to claim 22, wherein when the data reproduced from ~~said~~ the second recording area are determined to include the data to be inhibited ~~to be from being~~ outputted, identification is performed by using data reproduced from the second recording area, and only when restriction on the output of the data in the first recording area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

26. **(Currently amended)** The method according to claim 22, wherein when the data reproduced from ~~said~~ the second recording area are determined to include the data to be inhibited ~~to be from being~~ outputted, information signals are generated based on the data, and the contents data are superposed and outputted with the information signals.

27. **(Currently amended)** An apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, ~~said~~ the recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, ~~the~~ said apparatus comprising:

an optical head ~~which reproduces~~ operable to reproduce information from the optical disk with an optical spot;

a first reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the first recording area; and

a second reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the second recording area;

wherein when data to be inhibited ~~to be~~ from being outputted are recorded in the second recording area, said second reproducing section processes the data only therein.

28. **(Currently amended)** The apparatus according to claim 27, further comprising:

a detector ~~which detects~~ operable to detect an identifier, which shows whether information is recorded in the second recording area in the optical disk, from reproduced signals by ~~the~~ said first reproducing section; and

a controller ~~which moves~~ operable to move said optical head to the second recording area when said detector detects the identifier, reproduces control data from the second recording area by said second reproducing section, and decides according to the control data whether the data to be inhibited ~~to be~~ from being outputted are included ~~or not~~.

29. **(Original)** The apparatus according to claim 27, wherein said second reproducing section reproduces data in the second recording area according to a detection signal received by a photodetector provided in said optical head or a sum of detection signals received by a plurality of photodetectors provided in said optical head.

30. **(Currently amended)** The apparatus according to claim 27, further comprising a second detector ~~which detects~~ operable to detect whether a protective safety mode is set for the data in the first recording area in the optical disk, from reproduced signals from the second recording area by the second reproducing section, ~~wherein when the setting of the protective safety mode is detected by said second detector, said first reproducing section performs identification by using data reproduced from the second recording area, and only when restriction on the output of the data in~~

the first recording area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

wherein when the setting of the protective safety mode is detected by said second detector, said first reproducing section performs identification by using data reproduced from the second recording area, and only when restriction on the output of the data in the first recording area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

31. **(Original)** The apparatus according to claim 27, wherein the data to be inhibited to be outputted include a disk identification different for each optical disk.

a³⁶ 32. **(Currently amended)** The apparatus according to claim 27, ~~wherein the disk identification in the second recording area is ciphered~~, further comprising a key generator ~~which generates~~ operable to generate a secret key for decoding the contents data in the first recording area by using a ciphered disk identification included in the second recording area.

33. **(Currently amended)** The apparatus according to claim 32, wherein said second reproducing section ~~performs~~ is operable to perform verification by using the secret key generated by said key generator and deciphering and decoding for the contents data in the first recording area.

34. **(Currently amended)** The apparatus according to claim 27, ~~wherein ciphered data are recorded in the second recording area in the optical disk~~, further comprising:

a third reproducing section ~~which decodes the~~ operable to decode ciphered data recorded in the second recording area in the optical disk ~~in the second recording area~~ and reproduced by said second reproducing section;

a cipher decoder ~~for~~ operable to decode signals reproduced from the first recording area by said first reproducing section;

a first mutual authentication section provided in said third reproducing section; and

a second mutual authentication section provided in said cipher decoder;

wherein only when said first and second mutual authentication sections authenticate mutually, the ciphers reproduced from the first recording area are deciphered.

35. **(Currently amended)** The apparatus according to claim 27, wherein said second reproducing section ~~reproduces~~ is operable to reproduce ciphered data to be inhibited ~~to be from being~~ outputted, and further comprising a transmission section which transmits the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

wherein said apparatus further comprises a transmission section operable to transmit the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

36. **(Currently amended)** An apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, ~~said the~~ the recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, ~~the~~ said apparatus comprising:

an optical head ~~which reproduces~~ operable to reproduce information from the optical disk with an optical spot;

a first reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the first recording area; and

a second reproducing section ~~which reproduces~~ is operable to reproduce data with said optical head from the second recording area;

wherein said second reproducing section ~~generates~~ is operable to generate information signals based on data to be inhibited ~~to be from being~~ outputted recorded in the second recording area, and said first reproducing section ~~superposes~~ is operable to superpose the information signals to signals reproduced from the first recording area and ~~outputs~~ to output the superposed signals.

37. **(Currently amended)** The apparatus according to claim 36, further comprising:

a third reproducing section ~~which reproduces~~ operable to reproduce the superposed signals generated by said second reproducing section;

a cipher decoder ~~for~~ operable to decode signals reproduced from the first recording area by said first reproducing section;

a first mutual authentication section provided in said third reproducing section; and

a second mutual authentication section provided in said cipher decoder;

wherein only when said first and second mutual authentication sections authenticate identification mutually, the ciphers reproduced from the first recording area are deciphered.

38. **(Currently amended)** The apparatus according to claim 36, wherein said second reproducing section ~~reproduces~~ is operable to reproduce ciphered data to be inhibited ~~to be from being~~ outputted, and further comprising a transmission section which transmits the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

wherein said apparatus further comprises a transmission section operable to transmit the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

39. **(Currently amended)** A recording and reproducing apparatus for recording and reproducing contents from an optical disk having at least a recording layer for recording information, ~~said the~~ recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, ~~the~~ said apparatus comprising:

a generator ~~which generates~~ operable to generate information signals based on data inherent to the optical disk, recorded in the second recording area and inhibited ~~to be~~ from being outputted from the recording and reproducing apparatus, and

a recorder ~~which superposes~~ operable to superpose the generated information signals with predetermined signals and ~~records to record~~ the superposed signals to the first recording area or add them to the second recording area.

40. **(Original)** The recording and reproducing apparatus according to claim 39, wherein the signals to be superposed are watermarks generated by using a disk identification recorded in the second recording area.

41. **(Currently amended)** The recording and reproducing apparatus according to claim 39, further comprising a watermark adder ~~which adds~~ operable to add a watermark to the contents data in the first recording area, ~~wherein said watermark adder generates watermarks based on data recorded in the second recording area and reproduced with an optical head, adds the watermarks to the contents data and records the added data to the first recording area.~~

wherein said watermark adder is further operable to generate watermarks based on data recorded in the second recording area and reproduced with an optical head, to add the watermarks to the contents data and to record the added data to the first recording area.

42. **(Currently amended)** The recording and reproducing apparatus according to claim 39, further comprising:

a frequency converter ~~which converts~~ operable to convert reproduced signals from the first recording area from time axis signals to frequency axis signals to provide first conversion signals;

a mixer ~~which adds~~ operable to add or superposes the first conversion signals to signals reproduced from the second recording area to provide mixed signals; and

a reverse frequency converter ~~which converts~~ operable to convert the mixed signals from frequency axis signals to time axis signals to provide second conversion signals.

Q 36
43. **(Currently amended)** A recording apparatus for recording contents to an optical disk having at least a recording layer for recording information, ~~said~~ the recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, ~~the~~ said apparatus comprising:

a cipher device ~~which ciphers~~ operable to cipher the contents based on data including information inherent to a disk, the information having been recorded in the second recording area; and

a recording section ~~which records~~ operable to record the contents ciphered by said cipher device in the first recording area in the optical disk.

44. **(Currently amended)** The recording device according to claim 42 43, further comprising a watermark decoder ~~which decodes~~ operable to decode watermark information generated based on a disk identification from input signals, ~~wherein when decoded data obtained by said watermark decoder has a predetermined value, said recording section ciphers the input signals based on the disk identification and records the ciphered signals to the optical disk.~~

wherein when decoded data obtained by said watermark decoder has a predetermined value,
said recording section ciphers the input signals based on the disk identification and records the
ciphered signals to the optical disk.

45. **(Currently amended)** The recording device according to claim 42 ~~43~~, wherein said watermark decoder ~~converts~~ is further operable to convert input signals from time space to frequency space and ~~decodes~~ to decode watermarks by using the signals in the frequency space.

46. **(Currently amended)** A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, ~~said the~~ the recording layer disk comprising a first recording area for recording ciphered contents data and data for recording and reproducing the ciphered contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the secondary data including a disk identification inherent to each optical disk, ~~the~~ said apparatus comprising:

an optical head ~~which reproduces~~ operable to reproduce information from the optical disk with an optical spot;

a first reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the first recording area; and

a second reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the second recording area;

wherein said first reproducing section ~~decodes~~ is operable to decode the ciphered contents data by using the disk identification reproduced by said second reproducing section.

47. **(Currently amended)** The apparatus according to claim 46, wherein said second reproducing section comprises a PE-RZ phase-encode return-to-zero decoder.

48. **(Currently amended)** The apparatus according to claim 46, wherein said second reproducing section comprises a device ~~which suppresses~~ operable to suppress high frequency components with a cut-off frequency of 1.2 MHz ~~PE-RZ decoder~~.

49. **(Currently amended)** A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, ~~said the~~ recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the secondary data including a disk identification inherent to each optical disk, ~~the~~ said apparatus comprising:

an optical head ~~which reproduces~~ operable to reproduce information from the optical disk with an optical spot;

a first reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the first recording area; and

a second reproducing section ~~which reproduces~~ operable to reproduce data with said optical head from the second recording ~~area; area~~.

~~wherein said second reproducing section comprises a device which suppresses high frequency components with cut-off frequency of 1.2 MHz PE-RZ decoder and decodes the secondary data after suppressing high frequency components by the device.~~

50. **(Cancelled)**

51. **(New)** The apparatus according to claim 49, wherein said second reproducing section comprises a device operable to suppress high frequency components with a cut-off frequency of 1.2 MHz and to decode the secondary data after suppressing high frequency components.

52. (New) The apparatus according to claim 51, wherein said device is operable to perform
a³⁶ phase-encode return-to-zero decoding for the secondary data.
